

Patent

**Attorney Docket No.: 12553/73
Group: 2600**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS : Ming Gao YAO et al.
SERIAL NO. : 10/634,269
FILED : August 5, 2003
FOR : METHOD AND APPARATUS FOR IMPROVING THE
DESIGN AND MANUFACTURING PROCESS OF A
HARD DISK DRIVE MAGNETIC HEAD ARM
ASSEMBLY BY WELDING SPECIFIC COMPONENTS
GROUP ART UNIT : 2627
EXAMINER : Mark S. BLOUIN

M/S: APPEAL BRIEF – PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

ATTENTION: Board of Patent Appeals and Interferences

REPLY BRIEF

Dear Sir:

This is in reply to issues raised by the Examiner in his Answer of December 19, 2008.

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Reply Brief dated: February 19, 2009

REMARKS/ARGUMENTS

Appellants believe that the assertions in the Examiner's Answer are incorrect for at least the following reasons.

As argued in the Appeal Brief, Applicants respectfully submit the cited references do not teach or suggest at least a system for a magnetic head arm assembly wherein the surface of a pin element is directly attached to and physically connected along a surface of a first component and a surface of an arm portion (*e.g.*, as described in claim 1).

Such a feature is neither shown nor suggested by the cited Cox reference. *See e.g.*, cited Figs. 1 and 2. In Figure 1, the cited pin element (18) is not directly attached to either the cited first component (14) or the cited arm component (16); the cited pin element (18) is instead inserted through the guide hole 21 and hole 20, precluding direct attachment and physical connection. Similarly, in Figure 2, the guide hole 46 and hole 44 prevent the direct attachment or physical connection of a pin surface along the surface of a first component or the surface of an arm portion.

The Examiner asserts that pin 18 is shown to be "directly attached" and "physically connected" to a first component 14 by solder joint 12. *See Answer*, page 7. The Examiner's interpretation of claim 1 is incorrect and incomplete. Claim 1 does not describe a pin that is directly attached or physically connected to a first component by solder joint. The relevant limitations in sum describe a surface of a pin element that is directly attached to and physically connected along a surface of a first component and a surface of an arm portion. For at least the reasons described above, the Cox reference fails to teach or suggest these relevant limitations.

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The description of Cox supports Appellants' position as well. For example, column 3, lines 32-44 states: "Each solder joint 12 includes a pin 18 inserted into hole 20 in rotary arm 16. Each hole 20 can be drilled into rotary arm 16 at a cost which is cheaper to produce than the tapped holes required to secure flex cable 14 to rotary arm 16 with a screw. Pin 18 is pressed into hole 20 in rotary arm 16. Flex cable 14 includes a guide hole 21 for receiving each pin 18 when flex cable 14 is properly aligned adjacent to rotary arm 16. Hole 21 is preferably larger in area than hole 20 so that pin 18 can easily fit through it. In preferred embodiments, a solder pad is placed around hole 21. After flex cable 14 is placed over pin 18, it can be soldered in place, thus securing flexible cable 14 to rotary arm 16." This section describes pin 18 is pressed into hole 20, and that hole 21 is larger than hole 20. Therefore, if pin is pressed into hole 20, and hole 21 is larger than hole 20, it stands to reason that pin 18 is not directly attached to and physically connected to alleged first arm portion 14 – as shown in Figure 1 and as argued above.

Therefore, the current rejection of claim 1 is lacking. Independent claims 10, 19, and 27 recite similar limitations that are not found in the Cubero Pitel as well. Since at least these features of independent claims 1, 10, 19 and 27 are missing from the cited references, claims 1, 10, 19 and 27 are not anticipated under 35 U.S.C. § 102(b). Claims 2-5, 7-9, 11-14, 16-18, 20-26, and 28-32 are allowable as depending from the allowable base claims 1, 10, 19 and 27.

In view of the above, Appellant respectfully submits that the rejection of claims 14-20 should be reversed. Appellant therefore respectfully requests that the Board of Patent Appeals and Interferences reverse the Examiner's decision rejecting claims 1-5, 7-14, and 16-32 and direct the Examiner to pass the case to issue.

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The Examiner is hereby authorized to charge any additional fees which may be necessary
for consideration of this paper to Kenyon & Kenyon Deposit Account No. **11-0600**.

Respectfully submitted,

KENYON & KENYON LLP

Date: February 19, 2009

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